



US00D803724S

(12) **United States Design Patent** (10) **Patent No.:** **US D803,724 S**  
**Zhou** (45) **Date of Patent:** **\*\* Nov. 28, 2017**

(54) **AMPHIBIOUS UNMANNED VERTICAL TAKEOFF AND LANDING AIRCRAFT**

(74) *Attorney, Agent, or Firm* — Steven A. Nielsen;  
www.NielsenPatents.com

(71) Applicant: **Dylan T X Zhou**, Tiburon, CA (US)

(57) **CLAIM**

(72) Inventor: **Dylan T X Zhou**, Tiburon, CA (US)

We claim the ornamental design for an amphibious unmanned vertical takeoff and landing aircraft, as shown and described.

(\*\*) Term: **15 Years**

(21) Appl. No.: **29/578,694**

**DESCRIPTION**

(22) Filed: **Sep. 23, 2016**

**Related U.S. Application Data**

(63) Continuation-in-part of application No. 29/572,722, filed on Jul. 29, 2016, and a continuation of application No. 29/567,712, filed on Jun. 10, 2016, and a continuation-in-part of application No. 14/940,379, filed on Nov. 13, 2015, now Pat. No. 9,493,235, which is a continuation-in-part of  
(Continued)

FIG. 1 is a top perspective view of an amphibious unmanned vertical takeoff and landing aircraft with wings folded upward;

(51) **LOC (10) Cl.** ..... **12-07**

(52) **U.S. Cl.**  
USPC ..... **D12/16.1**; D12/324; D12/326

FIG. 2 is a top perspective view thereof, shown in an alternate configuration of use, with wings folded down;

(58) **Field of Classification Search**  
USPC ..... D12/16.1, 319, 323–345, 82, 88, 90, 91, D12/3, 4, 2; D21/436, 438, 439, 440, D21/441, 447, 448, 449, 450, 452, 453, D21/454, 455, 424, 533, 833  
CPC ..... B64C 1/062; B64C 39/024; B64C 27/08  
See application file for complete search history.

FIG. 3 is a top perspective view thereof, with wings extended;

FIG. 4 is a top perspective view thereof, with extended wings folded upward;

FIG. 5 is a right side view thereof;

FIG. 6 is a left side view thereof;

FIG. 7 is a front view thereof;

FIG. 8 is a back view thereof;

FIG. 9 is a top view thereof;

FIG. 10 is a bottom view thereof;

FIG. 11 is a perspective view of an amphibious unmanned vertical takeoff and landing aircraft in FIG. 3, shown in an alternate configuration of use, with onboard parachutes deployed;

FIG. 12 is a top perspective view of the amphibious unmanned vertical takeoff and landing aircraft in FIG. 2, shown in an alternate configuration of use, with rotor blades folded;

FIG. 13 is a top perspective view thereof, shown in an alternate configuration of use, with rotor blades and wings folded;

FIG. 14 is a top perspective view, shown in an alternate configuration of use, with engines tilted partially upward; and,

FIG. 15 is a top perspective view thereof, with engines tilted fully vertical.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

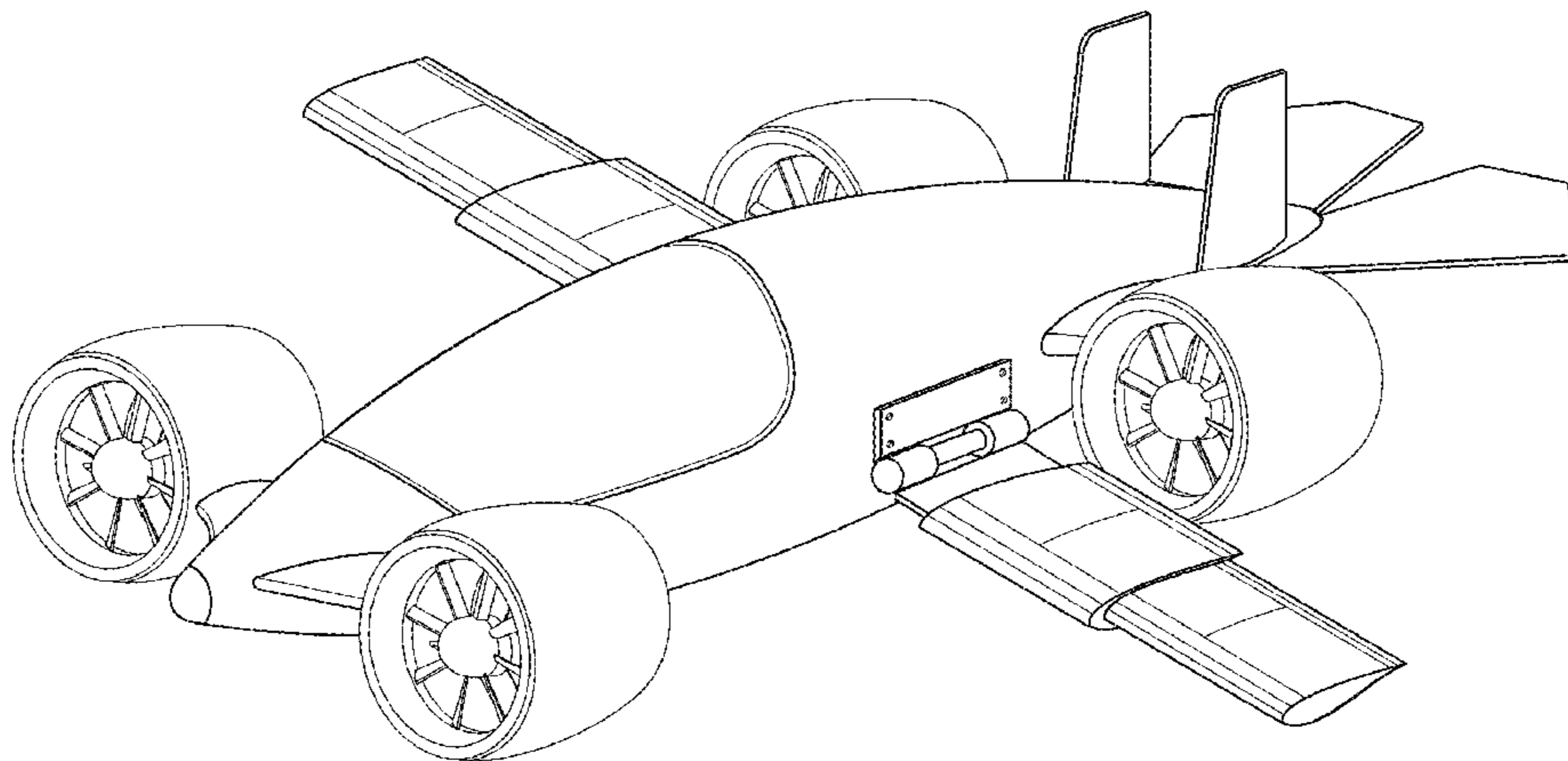
D88,107 S \* 10/1932 Fike ..... 296/181.5  
D95,247 S \* 4/1935 Grummer ..... D12/91

(Continued)

*Primary Examiner* — Robert M. Spear

*Assistant Examiner* — Marissa J Cash

(Continued)



The broken lines of FIG. 12 illustrate environmental factors only and form no part of the claimed design.

**1 Claim, 15 Drawing Sheets**

**Related U.S. Application Data**

application No. 14/034,509, filed on Sep. 23, 2013, now Pat. No. 9,510,277.

(56)

**References Cited**

U.S. PATENT DOCUMENTS

D99,156 S \* 3/1936 Covey ..... D12/91  
 D100,186 S \* 6/1936 Fitzmaurice ..... D12/91  
 2,156,288 A \* 5/1939 Holliday ..... B64C 37/00  
 180/7.4  
 D139,636 S \* 12/1944 Walker ..... 296/181.5  
 2,562,491 A \* 7/1951 Hall ..... B64C 37/00  
 244/2  
 2,562,492 A \* 7/1951 Hall ..... B64C 37/00  
 200/43.08  
 2,619,184 A \* 11/1952 Hall ..... B64C 37/00  
 180/54.1  
 5,915,649 A \* 6/1999 Head ..... B64C 37/00  
 244/17.17  
 D424,981 S \* 5/2000 Cook ..... D12/91  
 6,086,014 A \* 7/2000 Bragg, Jr. .... B60F 5/02  
 244/2  
 D545,925 S \* 7/2007 Milner ..... D21/533  
 D547,238 S \* 7/2007 Milner ..... D12/88

D610,950 S \* 3/2010 Helfet ..... D12/91  
 7,938,358 B2 \* 5/2011 Dietrich ..... B64C 37/00  
 244/2  
 8,152,096 B2 \* 4/2012 Smith ..... B64C 29/0033  
 244/12.4  
 D684,503 S \* 6/2013 Cook ..... D12/92  
 8,720,814 B2 \* 5/2014 Smith ..... B64C 29/0033  
 244/12.4  
 8,973,861 B2 \* 3/2015 Zhou ..... A63H 27/12  
 244/17.23  
 D736,140 S \* 8/2015 Moller ..... D12/326  
 9,099,902 B2 \* 8/2015 Chen ..... H02K 5/225  
 9,139,299 B2 \* 9/2015 Lundgren ..... B64C 37/00  
 2003/0094536 A1 \* 5/2003 LaBiche ..... B60F 5/02  
 244/2  
 2004/0245374 A1 \* 12/2004 Morgan ..... B64C 29/0025  
 244/12.3  
 2008/0142643 A1 \* 6/2008 Yoeli ..... B60V 1/06  
 244/23 R  
 2010/0294877 A1 \* 11/2010 Jianu ..... B64C 29/0025  
 244/2  
 2013/0112804 A1 \* 5/2013 Zhu ..... B64C 29/0025  
 244/2  
 2015/0028150 A1 \* 1/2015 Klein ..... B64C 3/385  
 244/2  
 2015/0102155 A1 \* 4/2015 Krastev ..... B60K 16/00  
 244/2  
 2015/0314867 A1 \* 11/2015 Razroev ..... B64C 29/0033  
 244/119  
 2016/0001879 A1 \* 1/2016 Johannesson ..... B64C 27/50  
 416/142  
 2016/0243910 A1 \* 8/2016 Hu ..... B60F 5/02  
 2016/0272314 A1 \* 9/2016 Radu ..... B64C 37/00  
 2017/0072755 A1 \* 3/2017 Zhou ..... B64C 29/0075

\* cited by examiner

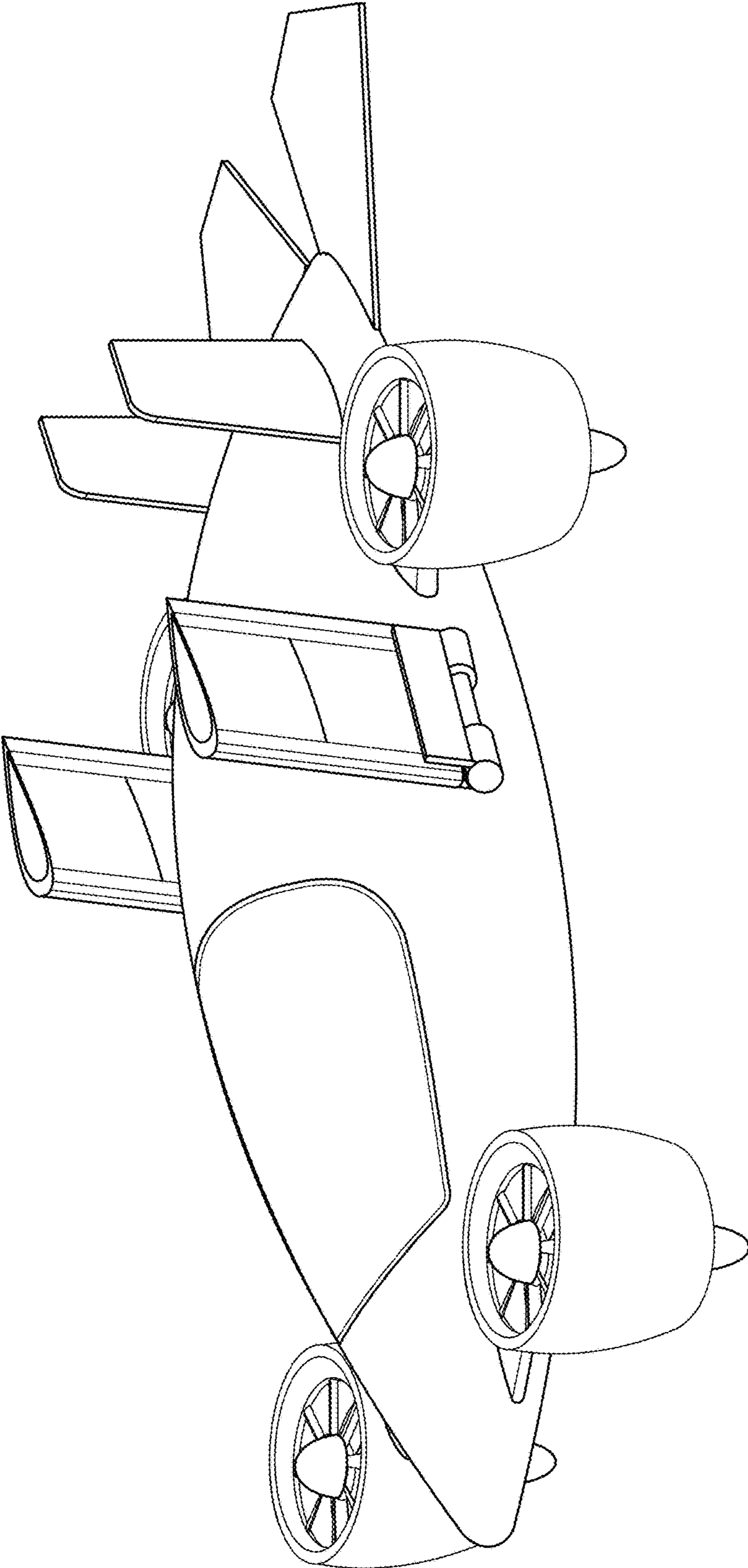
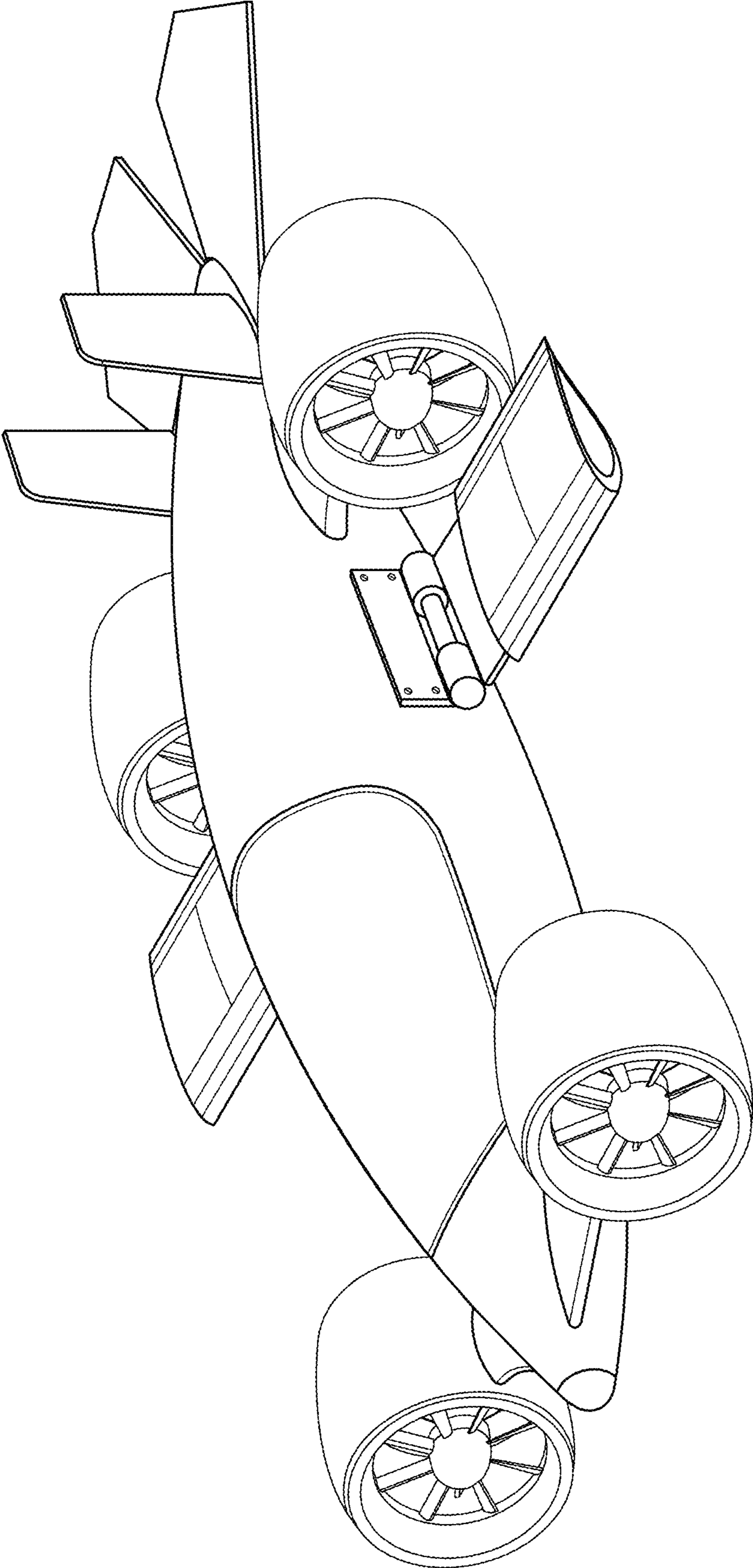


FIG. 1

FIG. 2



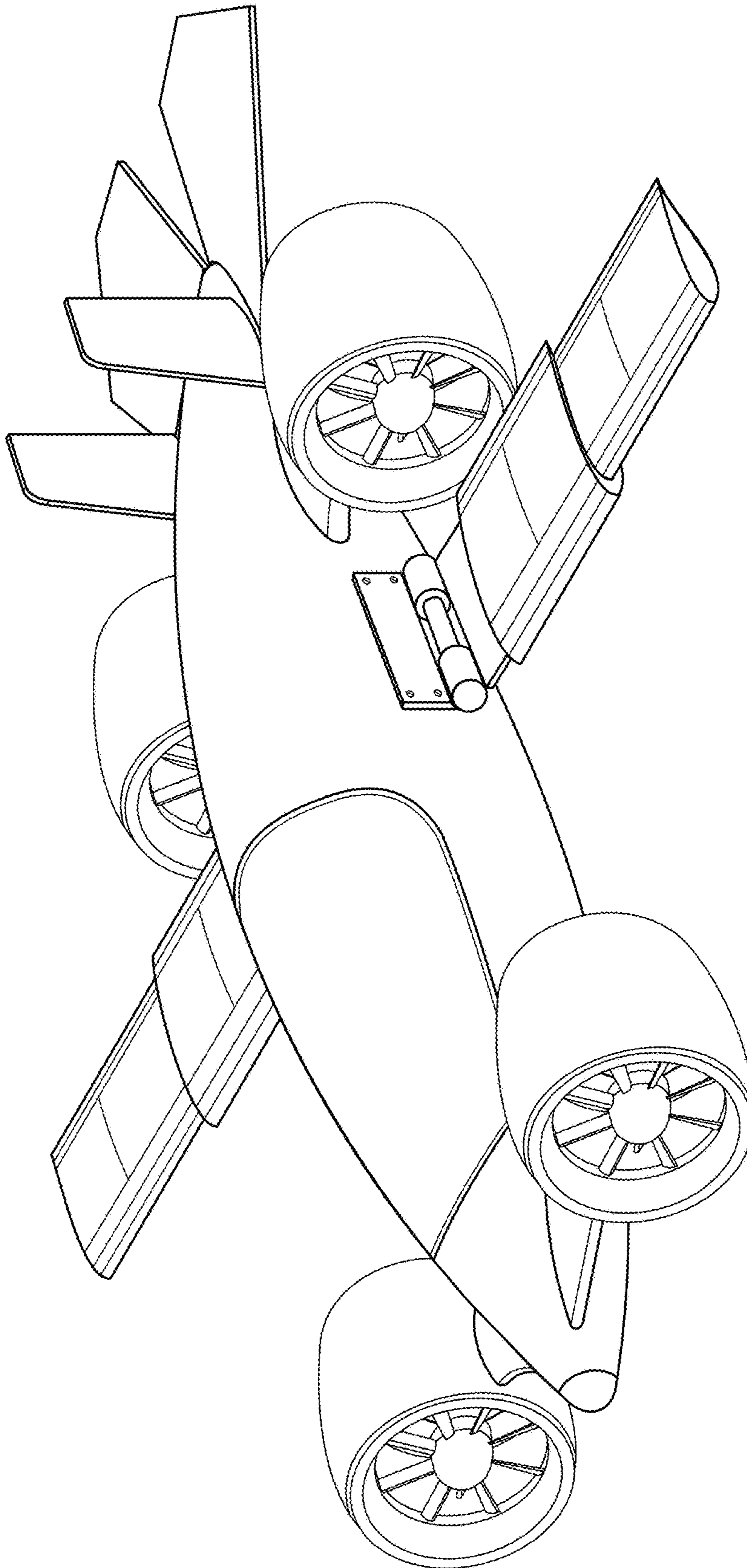


FIG. 3

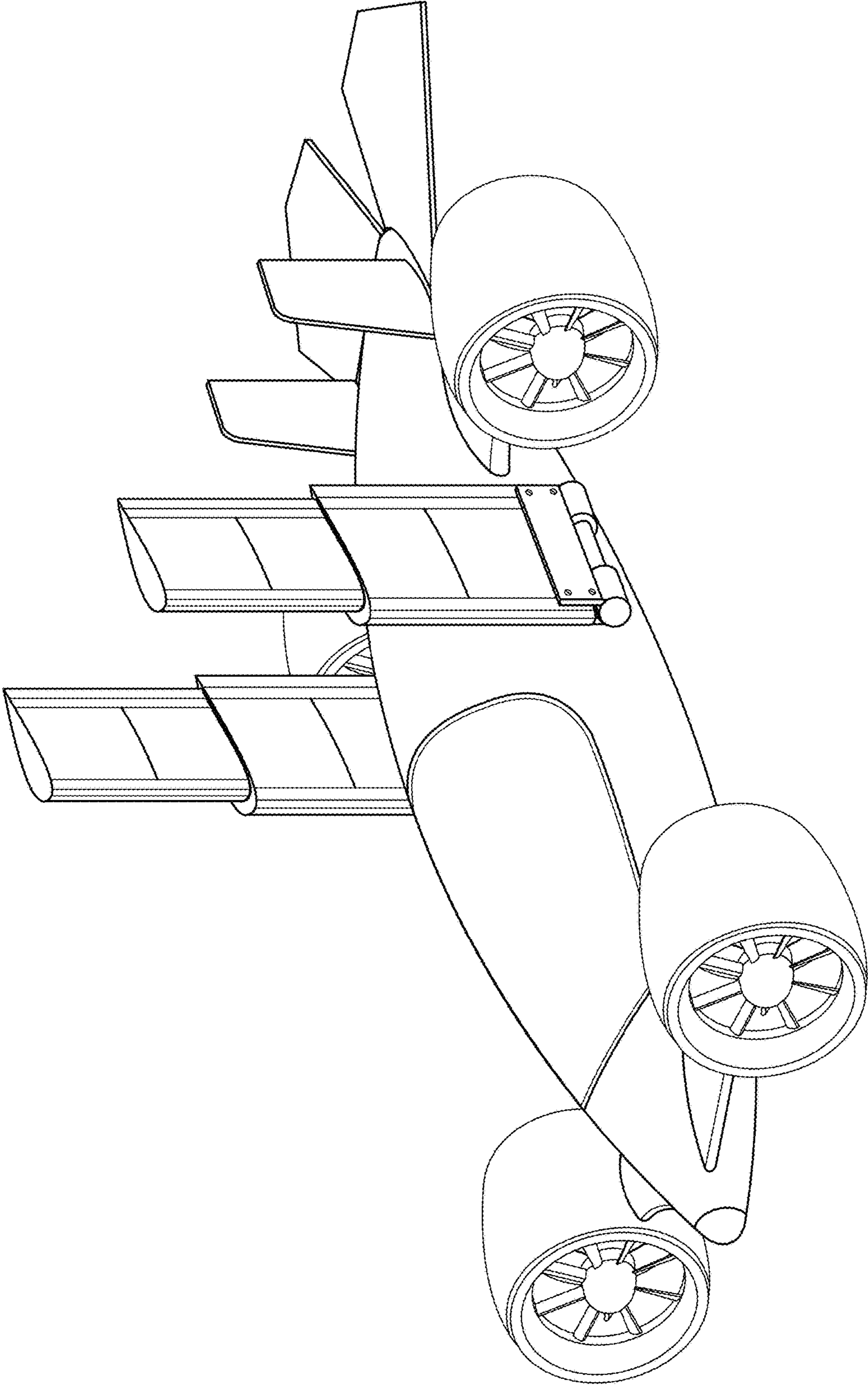


FIG. 4

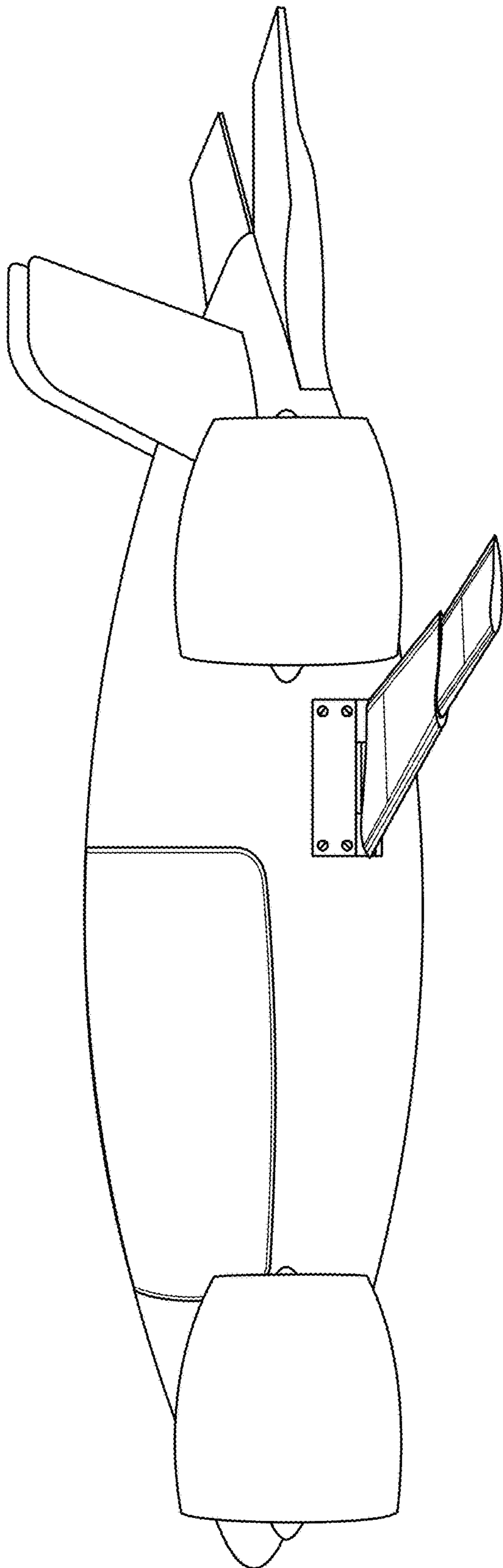


FIG. 5

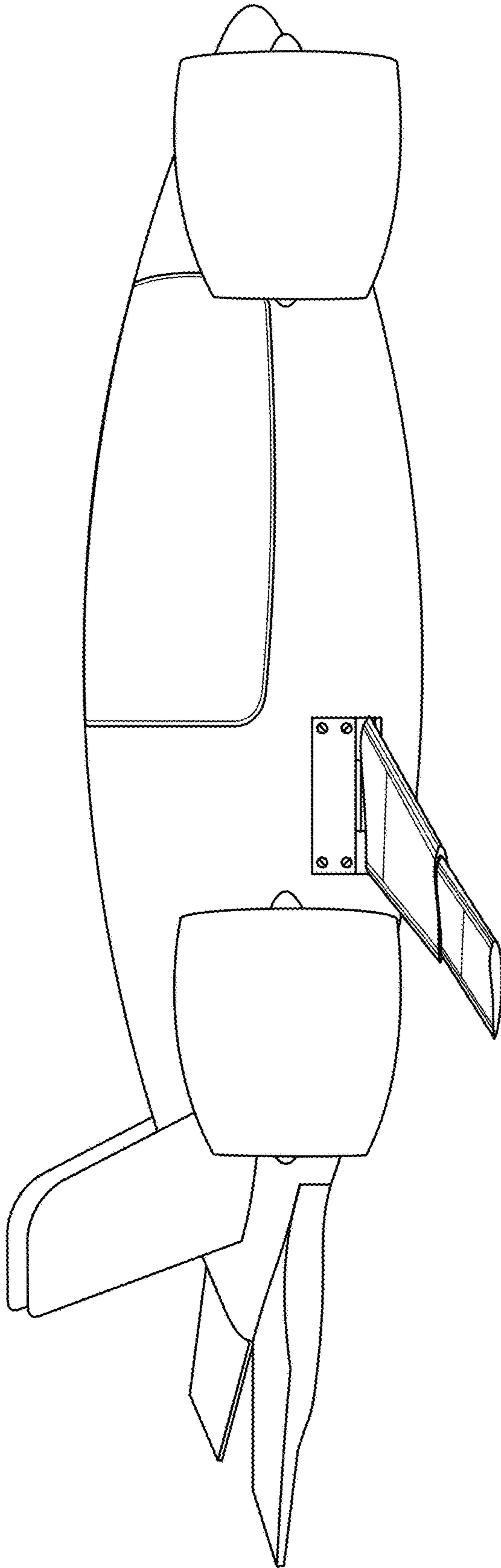
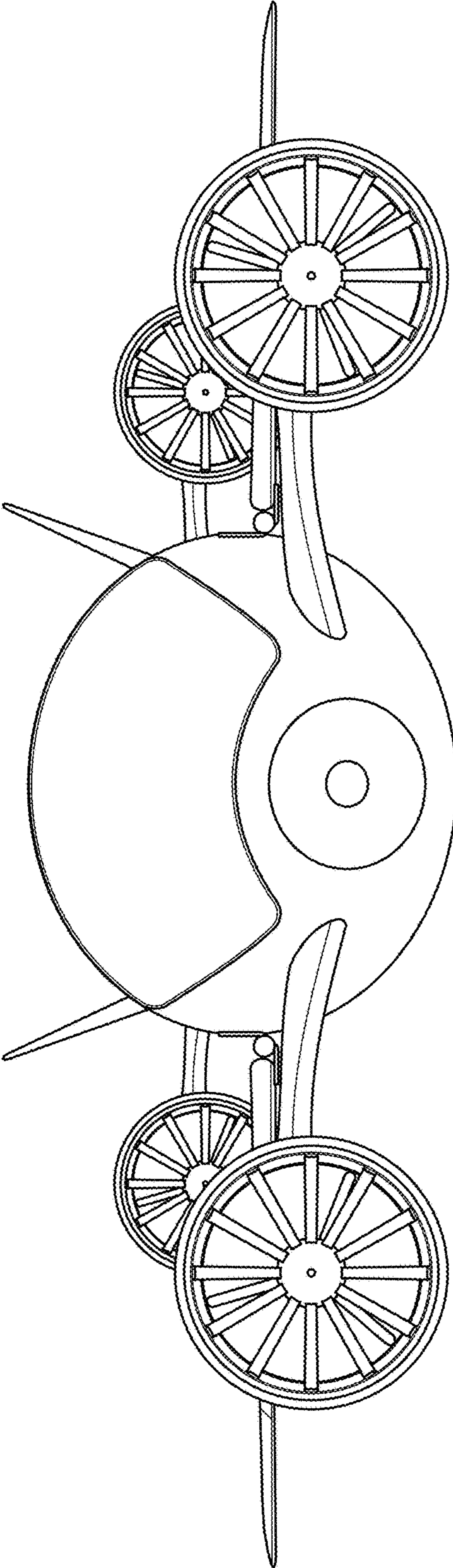


FIG. 6



FIG. 7



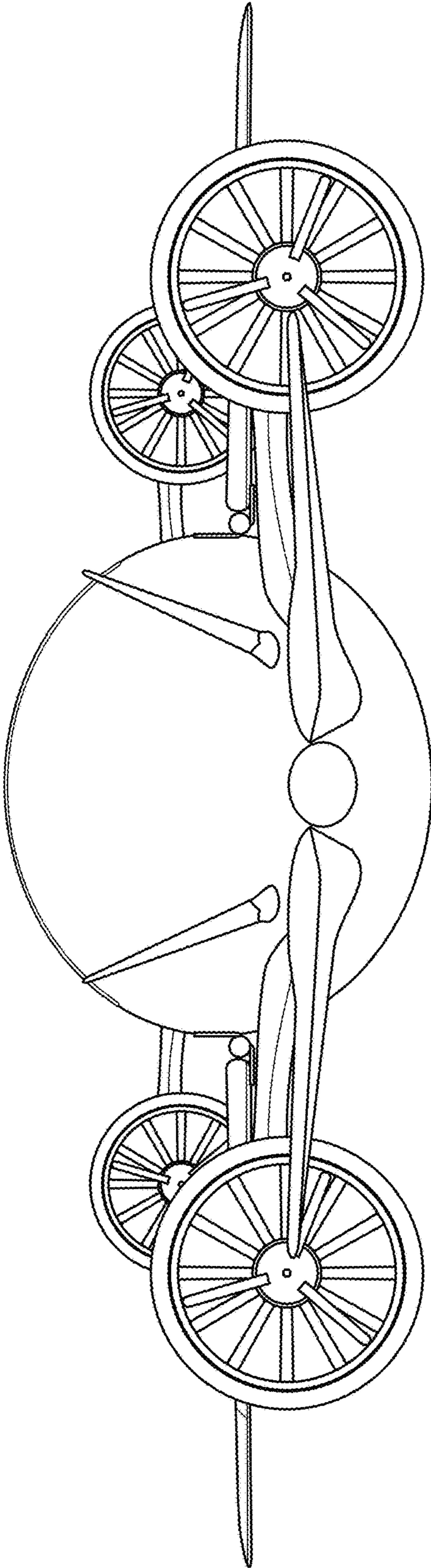


FIG. 8

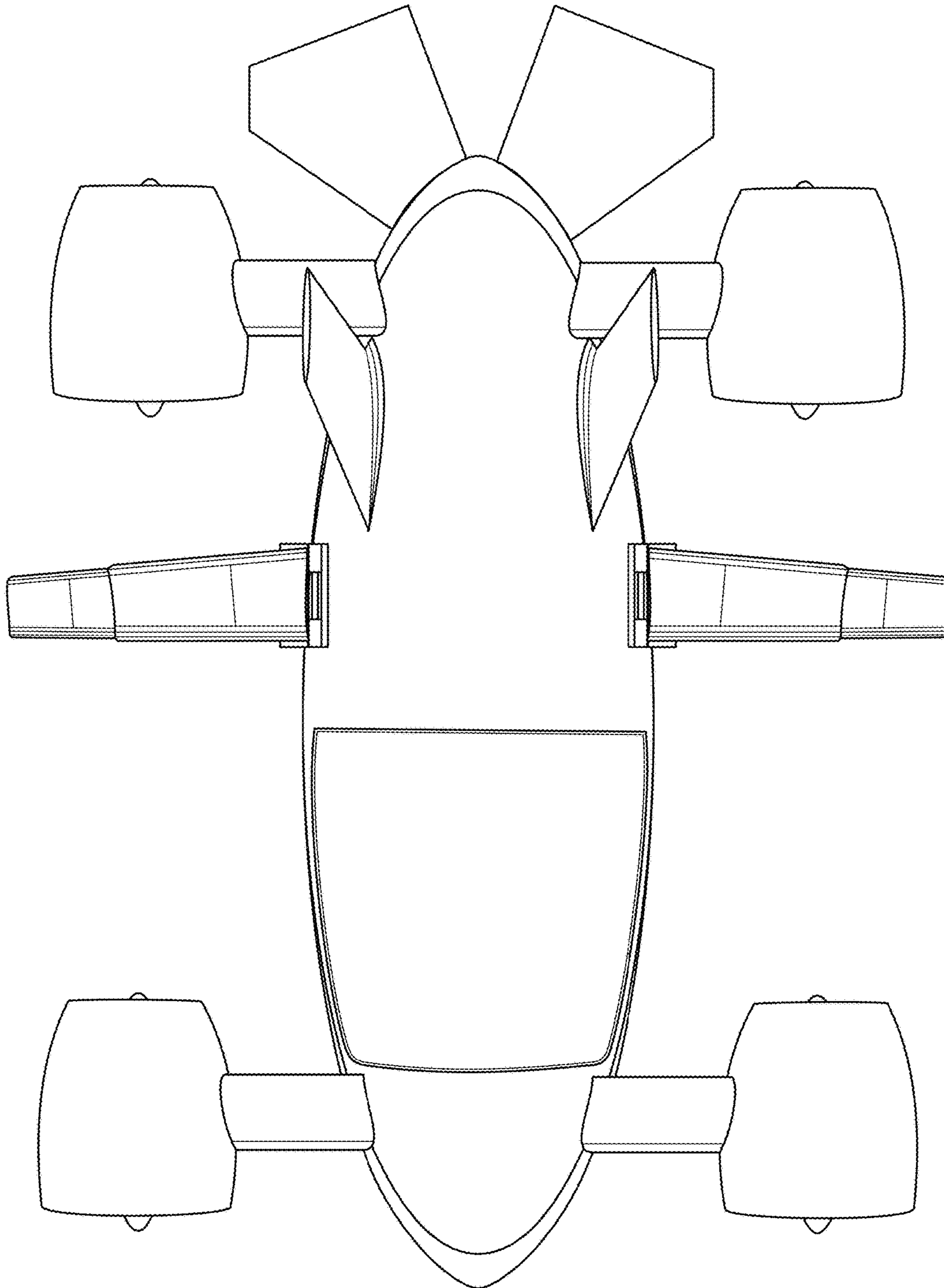


FIG. 9

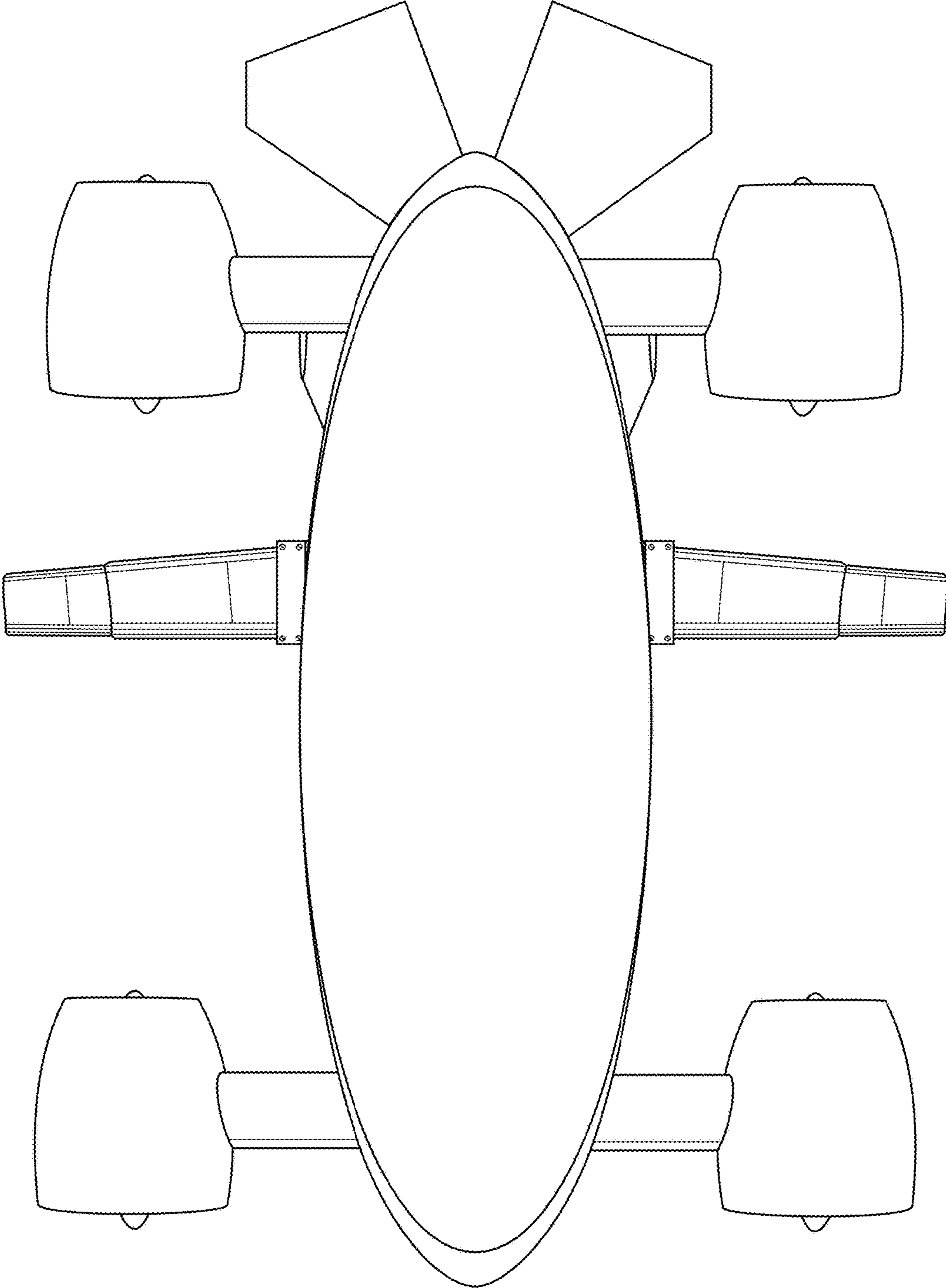


FIG. 10

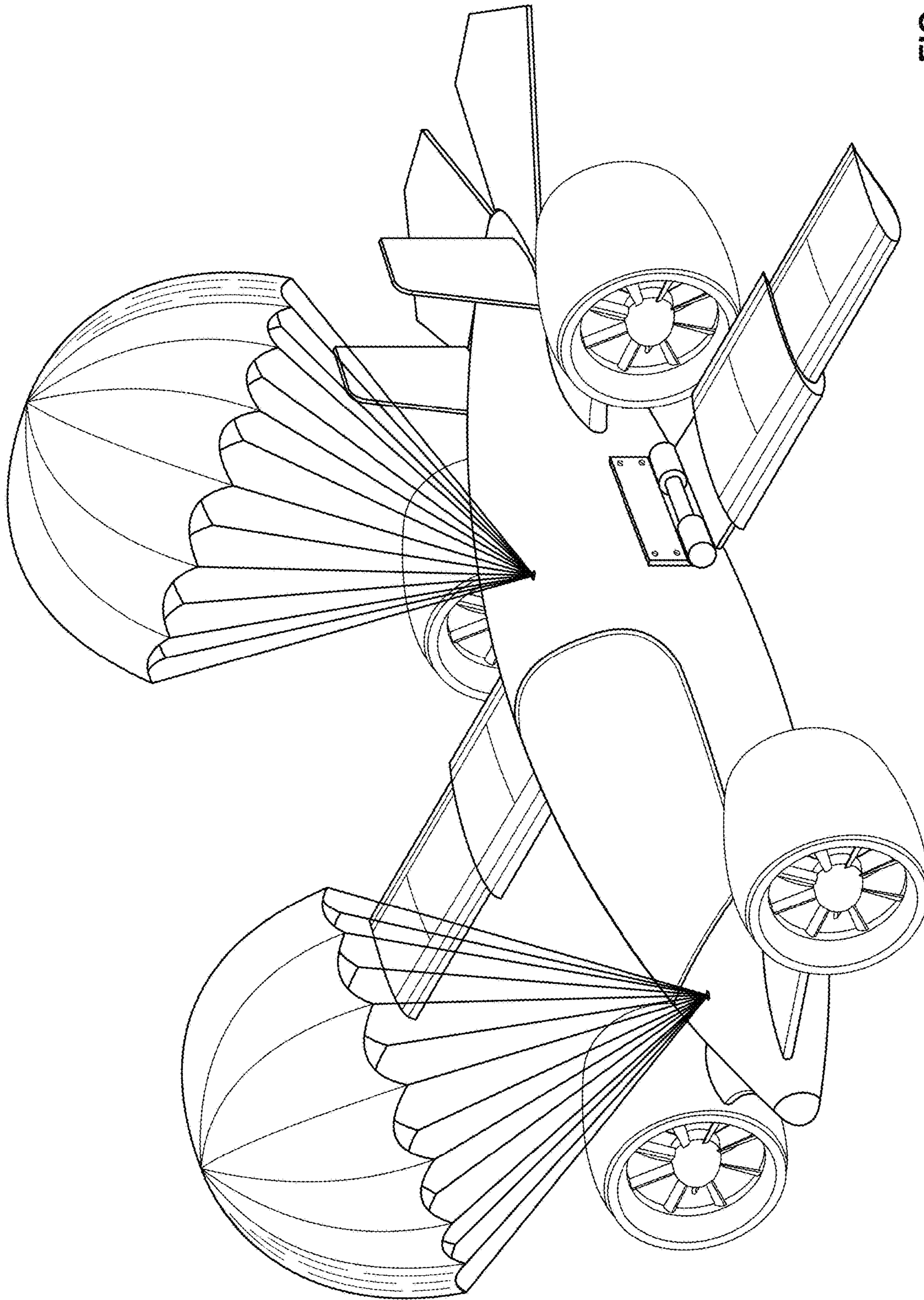


FIG. 11

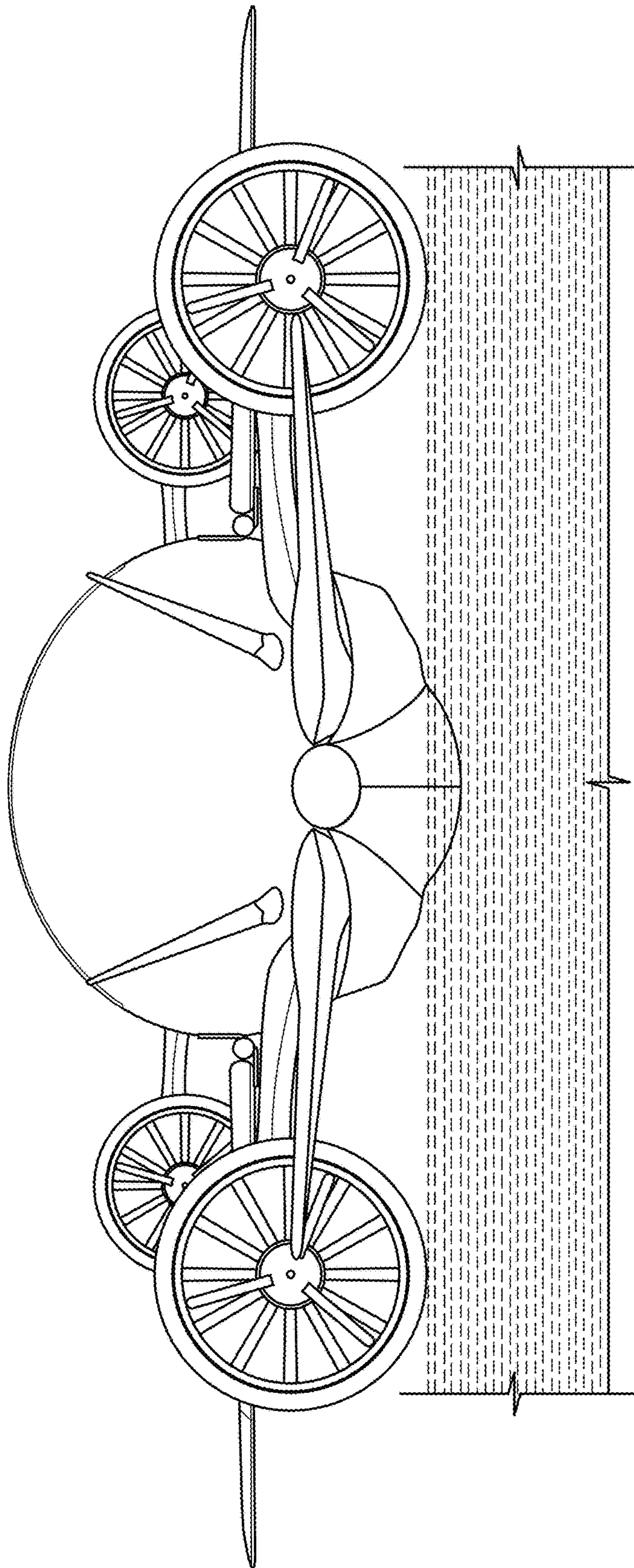
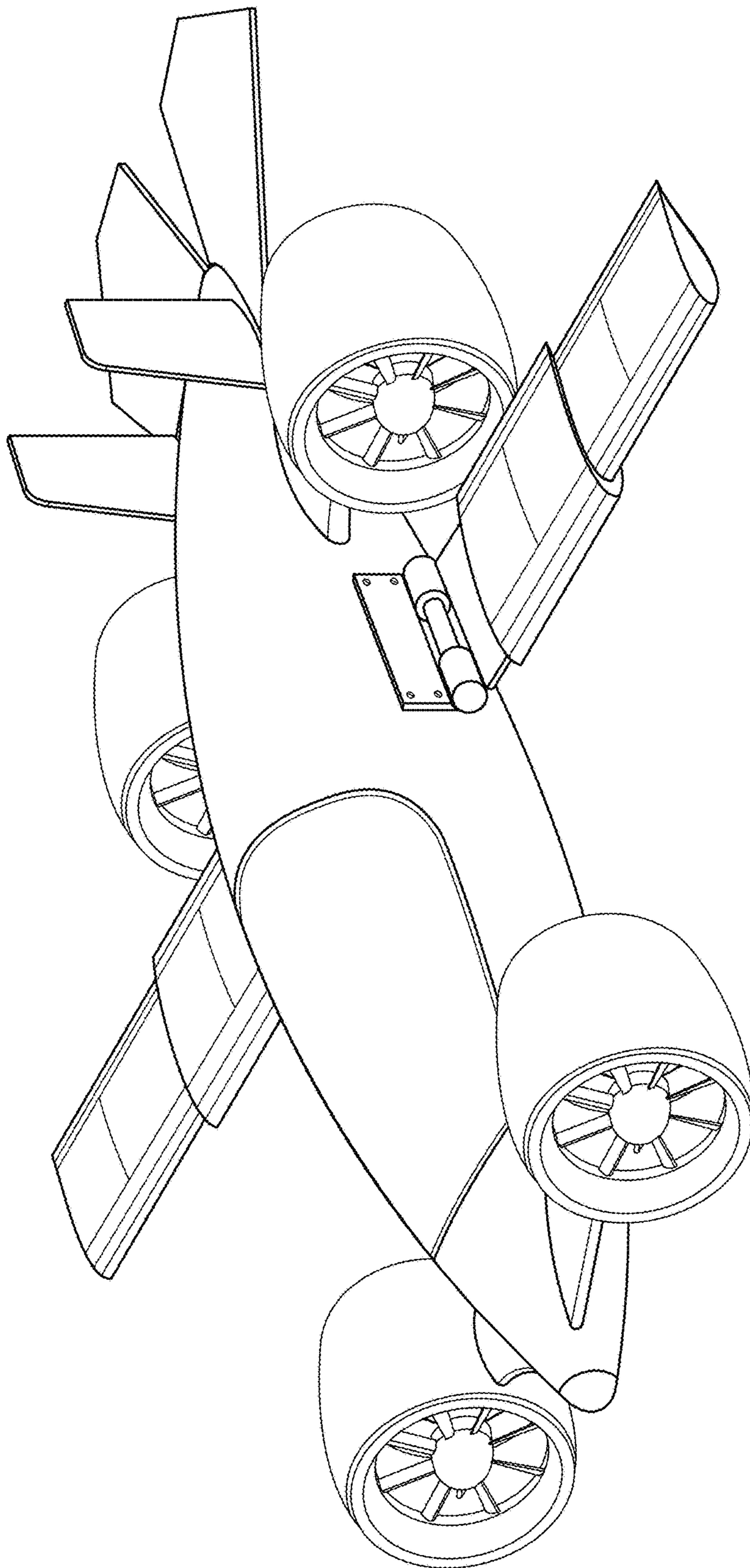


FIG. 12

FIG. 13



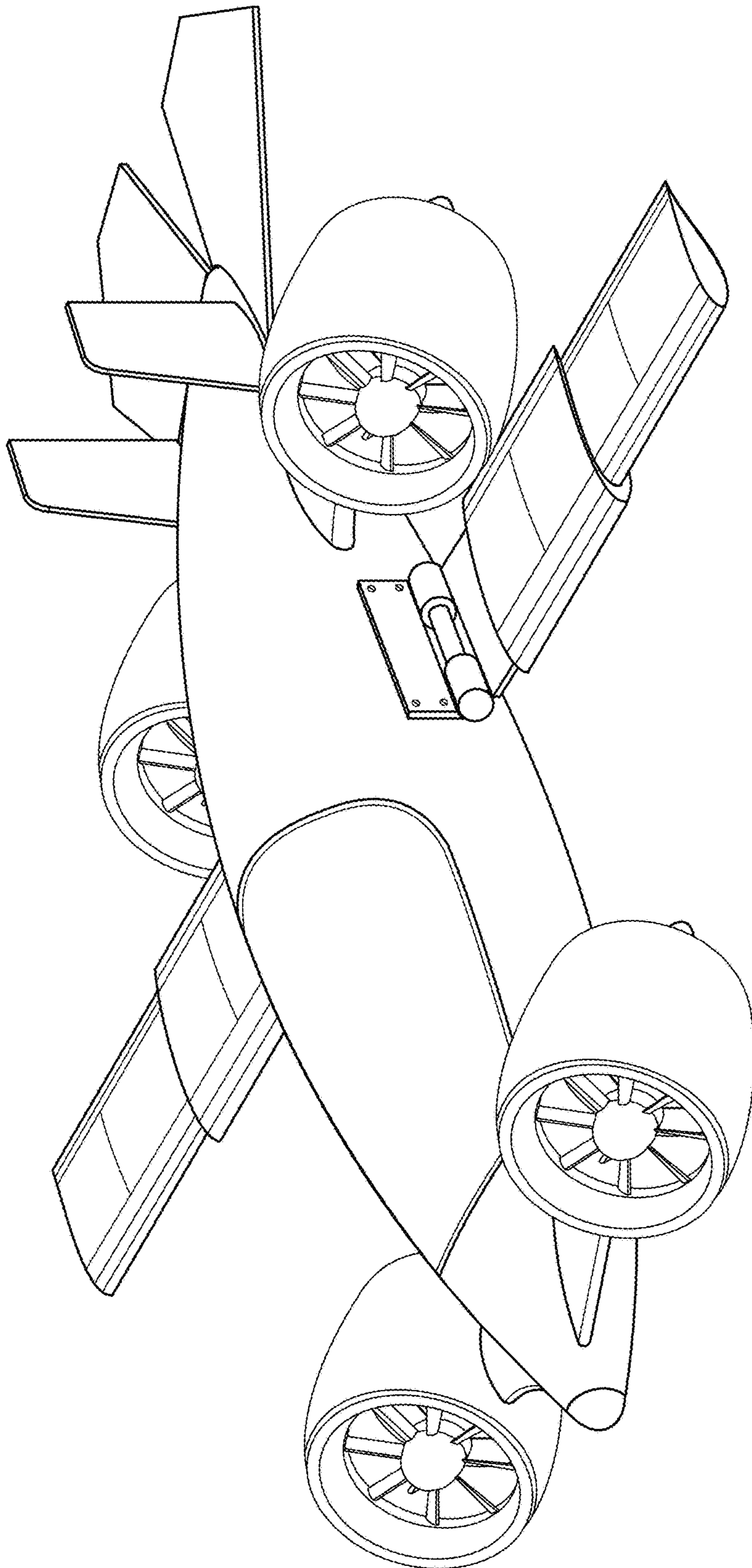


FIG. 14



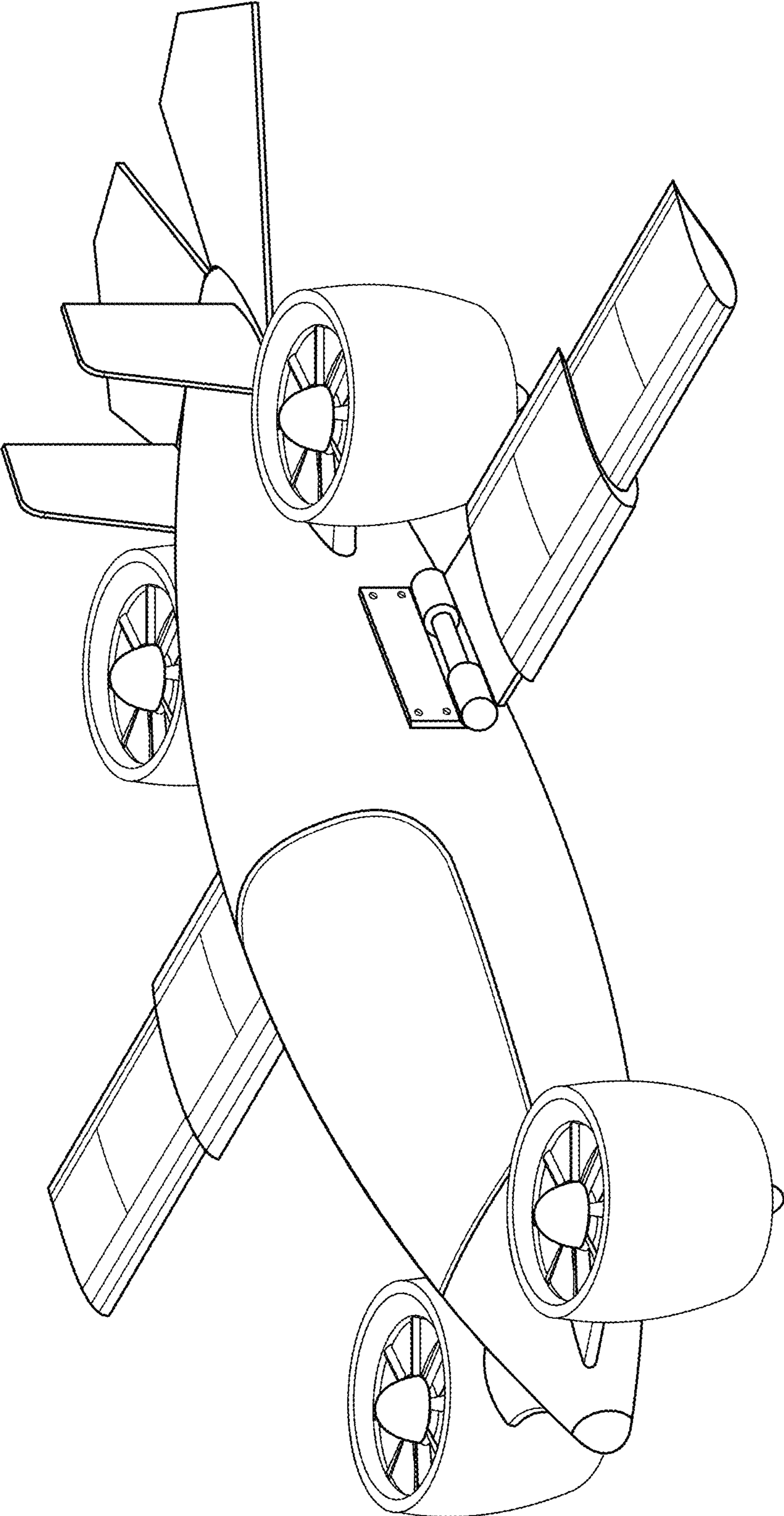


FIG. 15